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ABSTRACT

The separate yet related fields of early childhood education, compensatory education, and early childhood special education have formed the roots of early intervention. All three fields have contributed to the formation of a rationale for early intervention. This paper traces the history of early intervention. The first section reviews four movements in early childhood education: (1) the kindergarten movement; (2) the Montessori movement; (3) the nursery school movement; and (4) the day care movement. The second section reviews the history of compensatory education pertinent to young children. Early childhood special education is reviewed in the third section. The fourth (and final) section reviews the contributions of selected theorists and researchers that have provided the bases for a rationale for early intervention and have influenced the three fields of education mentioned above. It is argued that the events and individuals discussed have paved the way for what is now considered a "Zeitgeist," that is, the trend of thought and feeling that early intervention is indeed a viable strategy for reducing or eliminating the risk of academic failure for large numbers of children. A list of 173 references is included. (Author/RH)

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A HISTORICAL REVIEW OF EARLY INTERVENTION

By

Linda G. Kunesh

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Preface

In 1988, the author undertook a policy study to fulfill the dissertation requirement for the degree of doctor of philosophy in educational leadership and policy studies at Loyola University Chicago. A Historical Review of Early Intervention is based on the literature review conducted for the policy study and reviews pertinent educational movements and selected theorists and researchers who provided the bases for a rationale for early intervention.

The policy study, Early Intervention for At-Risk Children in the North Central Region: A Comparative Analysis of Selected State Education Agencies' Policies (Kunesh, 1990) identified and examined early intervention policies and state legislation for young children at risk of academic failure in Illinois, Indiana, Iowa, Michigan, Minnesota, Ohio, and Wisconsin. Descriptions of the processes undertaken by the states as they developed their polcies and legislation are provided. Further, the study compares each state's provisions with the components for effective early childhood programs recommended by the High/Scope Educational Research Foundation and the National Association for the Education of Young Children. And finally, the author analyzes the policies, legislative mandates, and provisions in terms of their implications for state and local decisionmakers.

The complete policy study can be obtained from:

North Central Regional Educational Laboratory
295 Emroy Avenue
Elmhurst, IL 60126
(708) 941-7677

Order Number: ECE-901; $10.00 (Early Intervention)
ECE-902; $ 2.50 (Early Intervention-Executive Summary)

LIST OF ABBREVIATIONS

ABC	Act for Better Child Care
ASCD	Association for Supervision and Curriculum Development
CCSSO	Council of Chief State School Officers
CEC	Council for Exceptional Children
CED	Committee for Economic Development
CSSO	Chief State School Officer
DEC	Division for Early Childhood, Council for Exceptional Children
DHHS	U.S. Department of Health and Human Services
DPI	Department of Public Instruction
ECFE	Early Childhood Family Education
ECSE	Early Childhood Special Education
EPSDT	Early Periodic Screening and Developmental Testing
ESEA	Elementary and Secondary Education Act
FERA	Federal Emergency Relief Act
HCEEA	Handicapped Children's Early Education Assistance Act
HCEEP	Handicapped Children's Early Education Program
IEP	Individualized Educational Plan
IFSP	Individualized Family Service Plan
LEA	Local Education Agency
PARC	Pennsylvania Association for Retarded Children
NAECS/SDE	National Association of Early Childhood Specialists in State Departments of Education
NAEYC	National Association for the Education of Young Children
NASBE	National Association of State Boards of Education
NASDSE	National Association of State Directors of Special Education
NCREL	North Central Regional Educational Laboratory
NEC*TAS	National Early Childhood Technical Assistance System
NGA	National Governors' Association
OEO	Office of Economic Opportunity
OERI	Office of Educational Research and Improvement
PL	Public Law
SEA	State Education Agency
START	State Technical Assistance Resource Team
WPA	Works Projects Administration

GLOSSARY

At-risk Children: Children who have been subjected to certain adverse genetic, prenatal, perinatal, postnatal, or environmental conditions that are known to cause defects or substantial developmental delay or are highly correlated with the appearance of later abnormalities or learning problems. [See also Children at Established Risk, Children at Biological Risk and Children at Environmental Risk.] These at-risk conditions are not mutually exclusive. They often occur in combination, interacting to increase the probability of delayed or aberrant development in children or to increase the degree of their impairment as a result of some primary physical disability. (Peterson, 1987).

Chief State School Officer: The state superintendent of education or of public instruction. Is synonymous with State Commissioner of Education and State Director of Education (Knezevich, 1984).

Child Development Associate (CDA): Nationally recognized credential awarded through the Council for Early Childhood Professional Recognition, a subsidiary of the National Association for the Education of Young Children, to individuals who have demonstrated criteria-based competence in working with children 3-5 years of age.

Children At Biological Risk: Children presenting a history of prenatal, perinatal, neonatal, and early development events suggestive of biological insult to the developing central nervous system and which either singly or collectively, increase the probability of later appearing abnormal behavior. Examples of children at biological risk are those 1) whose mothers had complications during pregnancy, such as injury or disease, 2) who were premature, 3) who were of low birth weight, 4) who had serious nervous infections, such as encephalitis, or 5) who had ingested toxic substances. Initially, no clear abnormalities may be detected but these indicators increase the probability that aberrant development or learning problems will appear later (Tjossem, 1976).

Children At Environmental Risk: Children who were biologically sound at birth but whose early life experiences and environment threaten their physical and developmental well-being. Examples of environmental factors which have a strong probability of adversely affecting a young child include lack of stimulation, poor nutrition, inadequate health care, parental substance dependence, and parental history of child abuse or neglect (Tjossem, 1976).

Children At Established Risk: Children whose early appearing and aberrant development is related to diagnosed medical disorders of known etiology bearing relatively well-known expectancies for developmental outcome within specified ranges of developmental delay. An example of children at established risk are those with Down Syndrome. The condition is known to produce certain abnormalities such as mental retardation (Tjossem, 1976).

Developmentally Appropriate: The term usually applied to activities and practices used with children that reflect the knowledge of human development research that indicates there are universal, predictable sequences of growth and change that occur in children during the first nine years of life. These predictable changes occur in all domains of development -- physical, emotional, social, and cognitive. Child-initiated, child-directed, and teacher-supported play is an example of a developmentally appropriate practice for young children (Bredekamp, 1987).

Developmentally Delayed: The term used to indicate that a child's growth is less than what one would normally expect for his chronological age in one or more of the following areas of development: cognitive; speech/language, physical/motor, psychosocial, and self-help skills. Significant delay is usually considered to be a 25% delay in at least one developmental area or a 6-month delay in two or more areas (Council for Exceptional Children).

Early Childhood Education (ECE): The term frequently applied to the education of young children from birth through age 8. For the purposes of this paper, ECE refers primarily to educational programs for young children prior to entrance into kindergarten. ECE also refers to the collective movements of education that serve young children from birth through kindergarten age. (See also Early Childhood Education for At-risk Children and Early Intervention.)

Early Childhood Education for At-Risk Children: Synonymous with Early Intervention. (See also Early Intervention and Early Childhood Education.)

Early Intervention: Services designed to meet the developmental needs of at-risk or handicapped preschoolers from birth to age 5, inclusive, in any one or more of the following areas: a) physical development; b) cognitive development; c) language development; d) psycho-social development; or e) self-help skills. Early Intervention usually includes the following: a) family training, counseling, and home visits, b) special instruction, c) speech pathology and audiology, d) occupational services, e) occupational therapy, f) psychological services, g) medical services only for diagnostic or evaluation purposes, h) case management services, and j) health services necessary to enable young children to benefit from the other early intervention services (PL99-457, 1986). Is synonymous with Early Childhood Education (ECE) for at-risk children.

Individualized Family Service Plan (IFSP): A plan written for each family of a handicapped infant or toddler that contains the following: 1) a statement of the infant's or toddler's present levels of physical development, cognitive development, language and speech development, psycho-social development, and self-help skills, based on acceptable objective criteria; 2) a statement of the family's strengths and needs relating to enhancing the development of the family's handicapped infant or toddler; 3) a statement of the major outcomes expected to be achieved for the infant or toddler and the family, and the criteria, procedures, and timelines used to determine the degree to which progress toward achieving the outcomes are being made and whether modifications or revisions of the outcomes or services are necessary; 4) a statement of specific early intervention services necessary to meet the unique needs of the infant or toddler and the family, including the frequency, intensity, and the method of delivering services; 5) the

projected dates for initiation of services and the anticipated duration of such services; 6) the name of the case manager from the profession most immediately relevant to the infant's or toddler's or family's needs who will be responsible for the implementation of the plan and coordination with other agencies and persons; and 7) the steps to be taken supporting the transition of the handicapped toddler to services provided under part B (of PL 99-457) to the extent such services are considered appropriate (PL 99-457, 1986).

Interagency Coordinating Council: A council composed of 15 members (at least 3 parents of handicapped children aged birth through 6, inclusive; at least 3 public or private providers of early intervention services; at least one representative from the state legislature; at least one person involved in personnel preparation; and other members representing each of the appropriate agencies involved in the provision of or payment for early intervention services to handicapped infants and toddlers and their families; and others selected by the state's governor). Among its functions as stipulated in Sec. 682 of 20 USC 1482, the Council advises and assists the lead agency in the identification of the sources of fiscal and other support for services for early intervention programs, assigning financial responsibility to the appropriate agency, and promoting interagency agreements (PL 99-457, 1986).

Local Education Agency (LEA): An educational agency at the local level which exists primarily to operate school or to contract for educational services (Knezevich, 1984).

Parent/Family Involvement: Family-oriented programs which are integrated into the overall early childhood education program and which provide parents and other family members with opportunities to participate in all phases of program development and implementation. Opportunities for parents and families to receive support, expand knowledge of child's development, increase parenting skills and extend children's learning at home are included (Michigan Department of Education).

Prekindergarten Program: For the purposes of this paper, means an early childhood education program which precedes the kindergarten experience. Is synonymous with Preschool Program.

Preschool Program: An educational program, which may include child care, for children who have not entered kindergarten and are not of compulsory school age. Is synonymous with prekindergarten program (Ohio Department of Education).

State Education Agency (SEA): An educational agency at the state level mandated by a state constitution or created through legislative action (Knezevich, 1984).

INTRODUCTION

Three separate yet related fields of education have formed the roots of early intervention: a) early childhood education; b) compensatory education; and c) early childhood special education. All three fields were influenced by theory and research and contributed to forming a rationale for early intervention.

This paper traces the history of early intervention. The first section historically reviews the four movements in early childhood education: the kindergarten movement, the Montessori movement, the nursery school movement, and the day-care movement. Section two reviews the history of compensatory education pertinent to young children. Early childhood special education (ECSE) is historically reviewed in section three. Section four, the last segment of this paper, reviews the contributions of selected theorists and researchers who provided the bases for a rationale for early intervention and influenced these three fields of education relating to young children.

Collectively, achievements in these three fields and the contributions of theorists and researchers paved the way for what is now considered a "Zeitgeist", that is, the spirit of the age, the trend of thought and feeling that early intervention is indeed a viable strategy to reduce or eliminate the risk of academic failure for large numbers of children.

Early Childhood Education

Early Childhood Education (ECE) is the term frequently applied to the education of young children from birth to age 9. For the purposes of this historical review, concentration centers on programs that were established to serve the needs of young children prior to and including kindergarten. Specifically, the writer has chronologically reviewed the historical development of the kindergarten movement, the Montessori movement, the nursery school movement, and the day-care movement. ECE has its historical beginnings primarily in Germany, Italy, England, and the U.S.

The Kindergarten Movement

During the early 1800s, Froebel established the first kindergarten (meaning a garden for children) in Germany. Considered the first truly "solidified approach to the direct instruction of young children" (Peterson, 1987, p. 111), Froebel's philosophy emphasized several basic principles:

(a) Education should be passive in the sense that it is primarily protecting and nurturing the child, but not prescriptive or controlling;

(b) Play is natural to children and should constitute the heart of the curriculum;

(c) Play is the means by which children gain insights, and it is the means for mental development; and

(d) Play should be free play, not something to be interfered with by adult supervision (Peterson, 1987, p. 112).

In Froebel's kindergarten emphasis was placed on training children, 3-6 years of age, in habits of cleanliness, neatness, punctuality, courtesy, deference toward others, language, numbers, forms, and eye-hand coordination. Lazerson (1972) described Froebel's program as such:

> his proposals synthesized religion, missionary zeal, and educational needs. . . . after the age of three, the child should enter a 'children's garden' where he would take his place among his peers, adjust to their companionship, and be integrated into the institutions of the larger society. In the kindergarten a trained teacher nourished healthy and weeded out destructive tendencies (p. 37).

Lazerson (1972) also contended that Froebel's greatest innovation was that of play and that it in essence

> involved the channeling of spontaneous energies into orderly behavior. It allowed the child to express his physical needs but, properly guided through the use of Froebel's requirements, it adjusted him to peer and adult requirements. The child learned the rules of the game and naturally responded to order and harmony as he grew older (p. 37).

As Froebel's ideas proliferated around Germany, the need for trained teachers increased and he became involved in teacher training (Peterson, 1987).

Several individuals were particularly responsible for the growth of Froebel's kindergarten in the United States. Margarethe Schurz, one of Froebel's former students, established the first kindergarten for German-speaking children in Watertown, Wisconsin, in 1856. Elizabeth Peabody established the first English-speaking kindergarten in Boston in 1860 (Peterson, 1987).

Influenced by Peabody, William Harris, the school superintendent of the St. Louis Public Schools, began the first experimental kindergarten in the public schools in 1872. However, the concept of the kindergarten as part of the public school system was formalized due to the efforts of Susan Blow, the director of the first public school kindergarten in St. Louis. Blow became the champion of Froebelism during the time progressive education was advocated by G. Stanley Hall and John Dewey (Peterson, 1987; Lazerson, 1972; Evans, 1971).

During the latter part of the 19th century and the early part of the 20th century, various private agencies, mothers' clubs, and philanthropic groups continued to promote and sponsor kindergartens in the U.S. in attempt to solve the problems caused by industrialization and urbanization that affected young children. The kindergarten's goals were a mixture of child socialization to middle-class norms and broader social reform. The kindergarten also attempted to change family life in the slums through the education of parents. Those who worked in kindergartens visited children's homes and instructed parents in the physical and emotional care of their children (Lazerson, 1972; Peterson, 1987).

Professionalization of ECE also grew during this time period. Established in 1892, the International Kindergarten Union was composed of kindergarten teachers, directors of kindergarten training schools, and supervisors of kindergartens in public schools. By 1918, its membership had grown to 18,000 making it the third largest educational organization in the world (Lazerson, 1972).

Growth also occurred in the number of kindergarten departments in normal schools and colleges, and a number of teacher training institutions combined kindergarten and primary school preparation into a single course of study (Weber, 1969).

Growth in the profession, however, also produced controversy. The relationship of symbolism to realism in the early childhood classroom, the extent of free play versus teacher direction, and the nature of creative activity were major areas of contention. While Froebel claimed to begin with the child, self-styled progressive critics argued that his pedagogy drew too much upon adult needs. They called for activities drawn from daily experiences and the surrounding community, and sought to substitute more freedom and individual choice for excessive imposition of order (Lazerson, 1972).

Anna Bryan was one of the first dissenters to question rigid adherence to Froebel's principles. Patty Smith Hall, Bryan's first student, carried the reform movement forward. In 1913, her "Report for the Committee of Twelve" to the International Kindergarten Union presented three key arguments:

1. Kindergarten curriculum should be related to the child's present circumstances rather than to the needs of children from another culture and another generation.

2. Children's personal experiences should be used as the vehicle for helping children gain insight and knowledge about their world.

3. Children should be allowed the freedom to engage in concrete, child-oriented play experiences based upon the natural activities of childhood (Peterson, 1987, p. 114).

According to Spodek (1978) the liberal reform advocated by Hall and others was a simple attempt to retain the general Froebelian philosophy but without the formalism that dominated the curriculum and teaching methodology.

G. Stanley Hall and John Dewey were two additional individuals who made significant contributions to the progressivism of the kindergarten reform movement. Both are considered instrumental in linking research and scientific thinking in psychology with education, including ECE.

Hall was credited with being the "father of child psychology" and introduced techniques of data collection, anecdotal records, and the analysis of children's products. Further, he believed kindergarten practices should evolve from empirical, objective observations of the child (Peterson, 1987).

Dewey, one of Hall's students, applied the theory of progressivism to American education and the kindergarten. Believing that education should involve active learning and problem solving, social interaction, and learning by doing things that were of interest to the child, Dewey established a laboratory school at the University of Chicago that included a classroom for 4- to 5-year-olds. Anna Bryan became the director of this kindergarten. Dewey argued that education should be integrated with life and be socially practical for the child, rather than preparation for an abstract, remote future (Weber, 1969; Braun and Edwards, 1972; Lazerson, 1972; Peterson, 1987).

According to Peterson (1987), the kindergarten reform continued into the 1920s and 1930s, and debates between the traditionalists and the progressivists continued and was fueled by the growing body of research from child research centers and laboratory schools.

Four critical events since the 1930s added to the changes in the kindergarten structure. First, the poor economic conditions of the 1930s and 1940s resulted in a decrease of kindergartens supported in the public schools. Second, there was a decline of the rigid formalism of education and a new awareness of social and emotional development due to the mental health movement. Third, the American people began to look critically at school curricula and the preparation students were getting after the Russians launched Sputnik in the 1950s. And fourth, since the 1960s, research on the effects of early experiences for young children, in particular those considered to have had stimulation deprivation, provided supporting evidence for the importance of early education and early experiences in young children (Peterson, 1987, Spodek, 1978).

While kindergarten today is viewed as a standard part of most public school systems (Peterson, 1987), the criteria for entrance and placement and the curricula taught are strongly criticized by educators and their professional associations (e.g., National Association of Early Childhood Specialists in State Departments of Education [NAECS/SDE], 1987; Bredekamp, 1987; Connell, 1987; Hill, 1987).

The Montessori Movement

While Dewey's philosophy began to affect early childhood education during the early 1900s, proponents were challenged by another European -- Maria Montessori. Having been trained as a medical doctor and influenced by the work of Itard and Seguin, Montessori began her educational work with mentally retarded children in Italy. Successes with the retarded prompted her to focus her attention on the urban poor. In 1907, she opened a *Casa de Bambini* (a children's house) for young poor children, ages 3 to 7. It was initially supported by the owners of a new housing development in the poorest and most crime-stricken area of Rome to minimize vandalism from children in the area. However, her successes far surpassed the expectations of her sponsors and drew attention worldwide. Not only was vandalism prevented, many children learned basic academic skills, such as reading, counting, and writing before they were 5 years old (Lillard, 1972; Lazerson, 1972; Weber, 1969; Peterson, 1987).

Montessori's classroom emphasized personal hygiene, good manners, and the use of manipulatives for problem solving. Individualized learning rather than group activities was the primary characteristic of the classroom environment. The Montessori method offered freedom within a carefully prepared environment (Montessori, 1964; Cohen, 1968).

According to Evans (1971), a number of key instructional and learning principles were central to the Montessori method:

- heterogeneous grouping of children by age;
- active involvement;
- self-selection and pacing in the use of materials;
- the use of self-correctional materials;
- learning activities arranged in graduated sequence;
- the use of one sense modality at a time;
- provision of extraneous cues to facilitate fine discriminations;
- repetition and practice; and
- the contiguity principle, that is, the association between a stimulus pattern and a response.

Word of Montessori's work spread rapidly, and people from all over the world traveled to observe the activities in the Montessori schools that were in operation in Italy and Switzerland. Some of the schools continued to serve young children from the slums, and one school was opened

in 1908 in Rome to serve children of well-to-do parents. Montessori's methods were also used in the orphan asylums and children's homes of Italian Switzerland. In 1909, she published the first comprehensive account of her work (Lillard, 1972).

Montessori's first trip to the U.S. was made in 1912 when she toured the country to lecture on her method. An American Montessori Association was formed with the wife of Alexander Graham Bell as president and the daughter of President Woodrow Wilson as secretary. Montessori schools were quickly established throughout the country, and many articles on Montessori education appeared in the popular press and education journals (Lillard, 1972).

The initial burst of enthusiasm for Montessori's methods, however, was gradually quelled by a great deal of criticism by some of the most highly respected members of the educational elite. One leading critic, William Kilpatrick, did the most damage to Montessori's popularity in the U.S. A popular and respected professor at Teacher's College, Columbia University, Kilpatrick wrote The Montessori System Examined in 1914, in which he dismissed Montessori's techniques as outdated. He questioned her assumptions about the transfer of learning, the lack of social cooperation in her methods, and criticized her instructional materials. Kilpatrick also utilized the forums of the International Kindergarten Union and the Kindergarten Department of the National Education Association and published numerous articles in the Kindergarten Review criticizing Montessori's methods (Lillard, 1972; Peterson, 1987).

By 1916, interest in Montessori and her methods had virtually died. Her ideas regained attention by a few lay citizens in the 1920s but most of the schools that were established disappeared during the 1930s and 1940s. Interest in Montessori revived again in the 1960s, and many private schools were established. The number of Montessori schools and programs continues to grow today. However, there is great variability in their adherence to the original system created by Montessori (Peterson, 1987).

The Nursery School Movement

While Montessori developed schools for young children in Italy and trained teachers in her method, Rachel and Margaret MacMillan established the first nursery school in London, England. Created as a health clinic for British slum children in 1910 called the Deptford Schools Treatment Center (Whitbread, 1972), the clinic soon evolved into an open-air school aimed at preventing

children's mental and physical illnesses. The MacMillan sisters coined the term "nursery school" for their center (Peterson, 1987).

The philosophy of the nursery school was based on the nurturance and concern for the whole child and emphasized the social, emotional, physical, and intellectual aspects of children's well-being. Teaching methods were inspired by Sequin, the French educator who worked with mentally retarded children. The curriculum was based on social concerns and values which was in contrast to Froebel's approach of religious values. Classroom activities focused on self-help skills (e.g., washing and dressing), learning responsibility, sensory education, language, activities to teach form and color, and pre-reading, writing, math, and science (Peterson, 1987).

In the U.S., the nursery school movement began slowly. Influenced by the MacMillan sisters, Abigail Eliot and Edna Noble White independently established nursery schools in 1922. Eliot established the Ruggles Street Nursery School in Boston; White established a nursery program at the Merrill-Palmer School in Detroit (Peterson, 1987).

Eliot, a social worker, and White, a home economist, added new dimensions to the nursery school philosophy, that of parent involvement and interdisciplinary involvement of professionals. While the kindergartens tended to focus on school "readiness," the nursery schools focused on the nurturance of children and their satisfaction with exploration (Osborn, 1975).

The establishment of model nursery school programs by several University Centers for Child Study further contributed to establishing the nursery school as an American institution. Founded in departments of home economics or departments of human development and family life, these child development laboratories trained teachers, conducted research, and provided services to children. Examples of these laboratories include the Gesell Child Guidance Nursery founded by Arnold Gesell in 1926 at Yale University, the Merrill-Palmer Institute in Detroit, Teachers College at Columbia University, and the Iowa Child Welfare Research Station at the University of Iowa. By the early 1930s approximately 200 nursery schools were in existence, nearly half associated with colleges and universities, approximately one-third owned by private schools, and one-fifth operated by child welfare agencies (Peterson, 1987).

Another contributing factor to the establishment of nursery schools occurred in 1925. Patty Smith Hall invited 25 early educators to meet at Columbia Teachers College. This group became

the nucleus of the National Committee on Nursery Schools in 1926, the forerunner of the National Association for Nursery Education. In 1964, that name was changed again to the National Association for the Education of Young Children (NAEYC), the major national professional organization concerned with early childhood education (Peterson, 1987; Braun & Edwards, 1972).

The Depression of the 1930s and World War II also significantly influenced the development of nursery school programs in the U.S. When centers could no longer pay teachers' salaries, they were left unemployed. In 1933, the federal government through the Federal Emergency Relief Act (FERA) and later under the Works Projects Administration (WPA) funded nursery schools operated through the public schools. Both the FERA and the WPA provided educational services for young children and stimulated teacher training programs to help teachers acquire the skills necessary to operate the programs (Braun & Edwards, 1972; Peterson, 1987).

The WPA nursery schools ended with the Depression, but the need for women to work for the war industry and to fill vacancies left by men who were called into the armed services during World War II brought the need again for education and child-care services for young children. According to Osborn (1975) and Spodek (1978) nearly one-third of the female population began working in defense plants and factories. Federal funds to establish educational and care services for young children were provided through the Lanham Act from 1940 to 1946. Those programs that continued to operate after federal funds were removed were operated under the sponsorship of local governmental agencies and philanthropic organizations (Peterson, 1987).

After World War II, nursery schools or preschool programs (as they are now commonly called) continued to grow, although slowly. The original eclectic philosophy allowed for considerable fluctuation and diversity in the approaches used without serious disagreements and conflicts among its leaders (Spodek, 1978; Peterson, 1987).

Peterson (1987) noted a number of important changes, however, that occurred in the preschool movement since World War II. First, nursery school or preschool education gradually became a program for the affluent rather than for the poor. Problems in funding partly account for this change. As government funding was lost, parents bore the brunt for financially supporting the programs. Thus, many poor families were unable to participate.

Second, due to the improved conditions after World War II, health aspects of the nursery school were deemphasized. However, Head Start renewed concerns for health and nutrition in 1965. Third, programs were shortened to half days, and often two- and three-day programs replaced five-day programs.

And fourth, curriculum expanded from a primary concern of "training the senses" to that of a broader educational program. Changes that arose in kindergarten reforms also provided impetus for change in the nursery school curriculum. More attention was placed on emotional development and social learning.

Today, the nursery school or preschool movement is characterized by expanding growth toward professionalization, strong emphasis on developmentally appropriate practices for young children, and strong support by many national organizations and groups advocating preschool education for all young children, particularly those who are disadvantaged or considered to be at risk of school failure.

Led by its professional association, NAEYC, the field of nursery school education has expanded to include practitioners and professionals from higher education, nursery schools, preschools, compensatory education, early childhood special education, and day care.

Preschool programs have also experienced tremendous growth. Since 1965, the enrollment rate for 3- and 4-year-olds has more than tripled from 11% to 39%. And these enrollments are expected to increase throughout the next decade as both population and participation rates of preschool-aged children grow (Day & Thomas, 1988).

Who are these children? Citing statistics from the Children's Defense Fund (1987), Warger (1988) explains that 67% of 4-year-olds enrolled in preschool programs come from families with incomes over $35,000. In contrast, less than 33% of this same age group come from families with incomes under $10,000. The same disparity is seen in 3-year-old preschool participants. Nearly 54% of the 3-year-olds enrolled in preschool programs are from families with incomes over $35,000; only 17% are from families with incomes under $10,000 (Day & Thomas, 1988).

The majority of all preschool participants attend private programs. Considering the fact that some programs can cost as much as $3,000 per year, it should come as no surprise that the expense for preschool is well beyond the means of low-income families (Day & Thomas, 1988). Head Start, the federally-supported program for disadvantaged 3- to 5-year-olds, currently serves only 16% of

the 2.5 million eligible children (Department of Health and Human Services, 1986). Thus hundreds of thousands of eligible children needing services are going unserved.

State legislative interest in educational programs for preschool-aged children increased dramatically in the 1980s. By 1987, 24 states and the District of Columbia spent state money on preschool programs and most states had targeted at-risk children for their programs (Grub, 1987; Gnezda & Sonnier, 1988). However, there is great variation in the size and scope of states' programs (Kunesh, 1990).

Support for increased public investment in preschool programs for young children has come from many diverse and influential organizations. Four major sources of support are discussed here.

In 1986, the **National Governors' Association**'s (NGA) Task Force on Readiness recommended that states develop initiatives to help at-risk preschool children become ready for school. Specifically, the Task Force suggested that states:

- provide in-home assistance for first-time, low-income parents of high risk infants;
- develop outreach initiatives using community and religious organizations;
- provide high quality early childhood development programs for all 4-year-old at-risk children, and where feasible, 3-year-olds;
- provide all parents of preschoolers information on successful parenting;
- stress continued improvement of developmental and educational programs in existing day-care centers for preschool children through center accreditation, teacher credentialing, and staff development;
- develop state and local structures through which various public and private agencies can work together to provide appropriate programs for young children and new parents (National Governors' Association [NGA], 1986, p. 14).

Further, in 1987, NGA published a handbook of promising prevention programs for children from birth to age 5 (NGA, 1987b) and a book to guide implementation of its 1986 recommendations (NGA, 1987c).

The **Committee for Economic Development**(CED), an independent research and educational organization of over 200 business executives and educators, also supports early intervention, particularly for disadvantaged youngsters as one of three investment strategies for the economic

well-being of the entire nation. Specifically, CED noted: "It is less costly to society and to individuals to prevent early failure through efforts directed toward parents and children alike from prenatal care through age five" (CED, 1987, p.11).

In 1987, the **Council of Chief State School Officers**(CCSSO) adopted a policy statement, "Assuring School Success for Students at Risk" (Council of Chief State School Officers [CCSSO], 1987a). Following the adoption of the policy statement by its membership, the CCSSO developed a model state statute as an example for implementing the policy statement (CCSSO, 1987b). Part II of the model state statute called for preschool child development programs to be made available to 3- and 4-year-old children who are at risk of educational failure.

Then in 1988, a study commission of the CCSSO drafted recommendations urging states to provide a wide range of services for children from birth who are at risk of school failure. Recommendations included the following:

- creation of statewide, integrated, and unified policy and action plans;
- coalitions of educators, human-service providers, business leaders, and citizens to secure resources;
- the establishment of standards and regulations to ensure appropriate developmental practices, parent involvement, and staff training;
- provisions to extend elements of high quality preschool programs into the elementary school curriculum;
- the development of multiple measures of assessing school readiness and to guard against inappropriate uses of tests for placement and labeling;
- the establishment of a data collection system to help coordinate services for young children;
- the creation of a national clearinghouse to gather information on model programs and research;
- providing comprehensive early childhood services for state employees to serve as a model for other agencies and the private sector; and
- the establishment of parent education training programs for early childhood staff (Gold, 1988a).

And another major source of support for public investment in preschool programs came in October, 1988, when the **National Association of State Boards of Education**'s (NASBE) Task

Force on Early Childhood Education released its report, Right from the Start(National Association of State Boards of Education [NASBE], 1988b). The NASBE report focused on young children, ages 4 to 8, and recommended ways for public schools to teach young children, work with their parents, and collaborate with other programs that serve preschoolers and their families.

The Task Force drew upon the advice of leading experts in early childhood education and the testimony of state legislators, school teachers, principals, superintendents, Head Start, child-care center directors, teacher trainers, and parents who attended one of four regional hearings.

The Task Force recommended that elementary schools create early childhood units for children ages 4 to 8. Specific local strategies were outlined for implementing developmentally appropriate curriculum, improved assessment, responsiveness to children's cultural and linguistic diversity, ensuring partnerships with parents, and providing training and support for staff and administrators.

In addition, the Task Force recommended public schools develop partnerships with other early childhood programs and community agencies to build and improve services for young children and their parents. Strategies for expanding and improving child care services, improving staff quality, and ensuring comprehensive services to children and families were provided. Further, the report recommended strategies to state policymakers in promoting the early childhood unit, collaboration in early childhood services, and financing early childhood services.

The Day-Care Movement

The history of the day-care movement in the U.S. can be divided into four major periods: pre-1920, 1920-1949, 1950-1969, and 1970 to the present (Steinfels, 1973; Peterson, 1987). The first period prior to the 1920s saw rapid growth of day-care centers or child-care centers in the U.S. due to rapid industrial growth. These centers were seen as necessary in order for women to work outside the home.

The second period encompassed the years from the early 1920s through the 1940s. Services provided for young children were primarily a result of the Depression and World War II, which were discussed earlier. However, Peterson (1987) noted some significant changes that began to occur in the character of day-care centers during the second period.

First, the obvious fact is that both the nursery school movement and the day-care movement served the same age group of children and tended to be influenced by each other. For example, educationally-oriented activities from the nursery school were incorporated into a number of day-care centers. Second, day-care centers began to limit entrance into their programs based on children's ages and certain entry requirements such as self-feeding and being toilet-trained.

The third period in the day-care history according to Steinfels (1973) came in the 1960s and was primarily fueled by the Economic Opportunity Act. This federal law focused on the special needs of disadvantaged youngsters and once again, day-care centers and nursery school programs began to flourish.

Then in the 1970s, the beginning of the fourth period, new social forces came into play that greatly affected programs for young children. The rise in inflation and economic growth sent many women back into the workforce and others into colleges and universities. Day care suddenly became an important and acceptable institution for the average working American family and not just a service for the poor. Several factors contributed to attitudinal changes which influenced the acceptance of day care:

> the women's movement and the changing status of women in our society, increased urbanization and shifts from the nuclear family, new knowledge about child development, and research suggesting that quality child care and early education do not have a negative effect on children (Peterson, 1987, pp. 122-123).

Peterson (1987) also noted that no significant leaders became associated with the growth of day-care services as was seen in the growth of other programs for young children. Rather, day-care programs developed from economic needs and emergency governmental actions. In the past, day-care programs had been less definitive about their purpose beyond basic care of children. Further, programs serving child-care needs have not always clearly articulated their philosophy about what constitutes quality child care and curriculum.

This situation, however, has changed as many educationally-oriented personnel crossed over into day care and as professionals from both fields work together to address programmatic and curricular issues. Today, NAEYC serves as a strong professional voice for both day-care and other early childhood professionals, particularly in the areas of accreditation standards, developmentally appropriate curriculum, and the need for affordable, available, and high quality child care.

Changing demographics has brought child-care needs to national attention. During the mid-1980s, 50% of mothers with 1-year-olds had already returned to work, and more than 25% of all impoverished mothers with children under the age of 6 were in the labor force (Hodgkinson, 1985). The Children's Defense Fund (1987) predicts that by 1995, two-thirds of all preschool children will have mothers in the work force.

In 1988, more than 100 child-care bills were introduced by the 100th Congress (Spencer, 1988). Of these, the most prominent and controversial was the Act for Better Child Care, or ABC, sponsored by Senator Christopher Dodd of Connecticut and Representative Dale Kildee of Michigan (NAEYC, 1988a).

ABC was originally supported by the Alliance for Better Child Care, a coalition of more than 100 national organizations including education and child welfare associations, religious groups, unions, women's groups, and public policy and advocacy organizations. More affordable child care, more available child care, and better quality child care were the key provisions of the bill (NAEYC, 1988b).

In final form, the bill was combined with the Parental and Medical Leave Act. According to Gold (1988b), competing interest groups and pre-election political maneuvering derailed the bill. Major issues included church-state separation, fear that subsidized day-care vouchers would open the door to a voucher program that would undermine the public schools, concern over federal day-care standards, and strong opposition to parental leave.

When the bill was not passed by the 100th Congress, there was strong optimism that prospects for federal child-care legislation would improve in 1989 (Gold, 1988b). However, again the bill was defeated. At the time of this printing, supporters of federal child-care legislation await word that the House and Senate have reached a settlement on a compromise child-care bill.

Day care has also become a major issue of commercial developers. In an interview conducted by Kerch (1989), Robert Shallenberger, vice-president of the Prudential Property Company, cited national demographic trends and said:

> We are convinced that child care will be one of the crucial issues of the 1990s. Child care gives employers a competitive edge. Providing child care near the office can expand a firm's existing labor force, can limit additional commuting trips by employees, and can complement a company's existing amenity plan. That gives them an edge on the competition (Kerch, 1989).

Thus, firms like the Prudential Property Company are including day-care facilities in their plans for multi-million dollar office complexes as incentives to corporate lessees.

* * *

Since the first kindergartens were established in the U.S. in an attempt to solve the problems caused by industrialization and urbanization that affected young children, ECE has always focused on social reform. Over the years, programmatic emphasis has been placed on a number of elements that are central to intervening early in a young child's life: development of the whole child, emphasizing the social, emotional, physical, and intellectual aspects of the child; working with parents; and interdisciplinary involvement of professionals.

The next section looks at compensatory education and its contributions to early intervention.

Compensatory Education

Compensatory education, as the term implies, refers to educational programs designed to compensate for real or perceived deficits in the early experiences and education of disadvantaged children. These programs targeted children of low socioeconomic status, and many served children from racial-ethnic minority groups (Peterson, 1987). The next section of this paper historically reviews four major projects within compensatory education that have influenced the concept of early intervention.

Project Head Start

As part of President Lyndon B. Johnson's War on Poverty, Project Head Start began in 1965 with the Economic Opportunity Act of 1964, PL 88-452. Head Start began as an 8-week summer program designed to help break the cycle of poverty affecting disadvantaged children across the country. It was initially developed as a pilot program for youngsters, age 3 through compulsory school attendance, in 2,600 communities and was managed through the Office of Economic Opportunity (Peterson, 1987; U.S. Department of Health and Human Services [DHHS], 1986). A comprehensive early history of Head Start can be found in Project Head Start: A Legacy of the War on Poverty (Zigler & Valentine, 1979).

According to Zigler and Valentine (1979), Project Head Start was built on three major premises. First, successful entrance of disadvantaged children into regular school programs would be facilitated by prekindergarten or pre-first grade education. Second, early experience and the quality of care determines the quality of intellectual development in young children. And third, achievement and intellectual growth in young children are impeded by impoverished environments which contain elements such as poor health care and nutrition, lack of educational opportunity, lack of stimulation, and an atmosphere of defeatism.

Head Start was designed to be a comprehensive intervention program to meet all elements of young children's early development. This effort of focusing on the whole child was relatively new and incorporated an interdisciplinary approach utilizing three fields of effort -- social services, health, and education (Peterson, 1987).

Peterson (1987) noted that while Project Head Start had much in common with movements in ECE, it contained four unique features. First, it was not merely an education or day-care program. Rather, it was a comprehensive, multidisciplinary intervention approach. In addition to providing education, medical-dental services, nutrition services, social services, psychological services, parent education and involvement, and a volunteer program, the project also trained staff to prepare low-income parents for jobs within the centers and helped low-income adults progress out of their poverty status through a career ladder approach.

Second, programs were established under Community Action Agencies and not administered through traditional public school administrative structures. The Community Action Agencies directly operated Head Start centers or they contracted with other community organizations to operate the program.

Third, the role of the parent was greatly emphasized in the program, much more so than was generally seen in nursery schools. "The intent was to bring parents into full partnership in the intervention with their child and in the operation of a social action program in their own community" (Peterson, 1987, p. 127). Parents could serve as members of the Parent Advisory Committees, serve as volunteers for various program functions, or be employed as paraprofessionals with subsequent training. Parents were also taught about their children's needs and educational activities that could be carried out at home.

Shortly after the program began, it became apparent that a longer program was needed. Thus, Head Start became a full year program (Peterson, 1987). Then in 1967, Parent and Child Centers were added to address the needs of children under the age of 3. In 1969, Head Start was delegated from the Office of Economic Opportunity to the Office of Child Development in the U.S. Department of Health, Education, and Welfare (National Early Childhood Technical Assistance System [NEC*TAS] and State Technical Assistance Resource Team [START], 1988).

Head Start was reauthorized under the Head Start Act of 1981, PL 97-35, and in 1982 an amendment to the Head Start Act required that no less than 10% of the total number of enrollment opportunities in Head Start programs in each state must be available for young children with handicaps. The full range of Head Start services are provided to handicapped children and their families in addition to special education and related services as needed. Head Start thus became one of the first major programs nationwide to service handicapped and non-handicapped children in an integrated setting (NEC*TAS & START,1988).

In 1984, the Head Start Act was again amended by the Human Services Reauthorization Act of 1984, PL 98-558. Currently Head Start is authorized through FY90 by the Human Services Reauthorization Act of 1986, PL 99-425. The program is administered by the U.S. Department of Health and Human Services (DHHS), Administration for Children, Youth, and Families (NEC*TAS & START, 1988; DHHS, 1986).

Since 1965, Head Start has served over 9.6 million children and their families. Each year it serves over 452,000 children (including 54,474 handicapped preschoolers) and their families in urban and rural areas in all 50 states, the District of Columbia, and the U.S. Territories. However, only 16% of the eligible 2.5 million children are currently being served (DHHS, 1986; Children's Defense Fund, 1987; NEC*TAS & START, 1988).

Cognizant that Head Start staff may need assistance in meeting the needs of young children with disabilities, the Administration for Children, Youth, and Families at the Department of Health and Human Services funded a network of projects called Resource Access Projects. The purpose of the Resource Access Projects was to provide training and technical assistance to Head Start grantees. In 1987, the Resource Access Projects were designated as liaisons between Head Start and SEAs through a signed agreement between the Administration for Children, Youth, and Families and the Office of Special Education in the U.S. Department of Education (NEC*TAS & START, 1988).

Considerable debate and conflicting reports of successes and failures have surrounded the effectiveness of Project Head Start. Datta (1979) reviewed the historical research on the outcomes of Head Start and noted that interpretations of Head Start's effectiveness shifted three times since 1965. The research data from 1965 to 1968 were interpreted as evidence that the program had at least immediate and possibly long-term benefits for young children. Then in 1969, the highly publicized Westinghouse Research Report (Westinghouse Learning Corporation, 1969) concluded that full year programs appeared marginally effective in producing gains in cognitive development through grade 3 when viewed from an overall group analysis; however, the program appeared to have a positive effect on parents.

The Westinghouse Research Report made a number of recommendations including the following which provided the rationale for intervention strategies that were later initiated:

1. Programs need to be year long if intervention is to be most effective;
2. Intervention should begin in infancy and continue into the primary grades;
3. Curriculum should be focused on deficits in such areas as language and math and on skills and concepts needed in the primary grades, and more refined and intensive intervention strategies should be applied; and
4. Parents should be trained to help their own children at home (Peterson, 1987).

As a result of the Westinghouse study, many people said Head Start had failed its mission while others argued that expectations for the program were unrealistic and that it wasn't meant to be a "cure-all" (Datta, 1979). Further, Datta (1979) pointed out that the negative publicity of the Westinghouse Report overshadowed the many parallel studies that showed positive outcomes. These outcomes included the following:

1. impact on communities including the modification of health services and practices for low-income families and increasing parent participation in decision-making (Kirschner Associates, 1970; MIDCO Education Associates, 1972; O'Keaf (1979);
2. impact on children's personal-social development including short-term gains in task orientation, social adjustment, achievement orientation, and ability to form close friendships with other children (Dunteman, 1972; Coulson, 1972; Emmerich, 1971);

3. significant gains in school readiness and a modest effect upon IQ test performance (Dunteman, 1972; Coulson, 1972; Stanford Research Institute, 1971a, 1971b, 1971c); and
4. impact on students' school achievement after Head Start including keeping pace with class peers, being placed less frequently in special education, and less likely to be held back in a grade (Datta, 1979; Shipman, 1972a, 1972b; Abelson, Zigler, & DeBlasi; 1974; Royster, 1977; and Weisberg & Haney, 1977).

In 1975, a third shift occurred regarding interpretation of Head Start's effectiveness. Richmond, Stipek, and Zigler (1979) reported that while all Head Start children did not maintain cognitive gains, many did continue to show cognitive gains over their non-Head Start peers well into the elementary grades. A longitudinal study from Yale University (Zigler & Yale Research Group, 1976) revealed that Head Start children demonstrated significant gains over non-Head Start children in fifth grade on three of five measures of academic achievement.

Other Federally-Supported Compensatory Education Programs

Project Head Start was not the only compensatory education program that the federal government created to intervene in the early lives of children considered at risk of academic failure or at risk of developmental delay. Other programs were also created during the 1960s and 1970s for disadvantaged preschoolers.

Parent and Child Centers were initiated in 1967 and targeted to children from birth to age 3 before they entered Head Start. The purpose of the Parent and Child Centers was to intervene through medical services and enrichment activities in order to head off potentially damaging effects in poor homes. Stimulation activities for children and activities for parents were additional components of the programs (Peterson, 1987).

Early Periodic Screening and Developmental Testing(EPSDT) was a program created in 1967 as part of Medicaid (Title XIX of the Social Security Act) and the Maternal and Child Health Program (Title V). EPSDT worked in collaboration with Head Start beginning in 1974 to assist parents in accessing services for their children. All children enrolled in Medicaid had to be screened regularly during their infant and preschool years to assess their health status. Appropriate referral for medical care and treatment was provided as necessary (Peterson, 1987).

Home Start was created in 1972 and provided the same child development services available in Head Start centers to children and their families within their homes. The program utilized a trained community resident known as a "home visitor" to work with low-income parents, teaching them how to provide stimulation to their infants and educational activities to their preschool-aged youngsters at home (Peterson, 1987).

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Compensatory education played a significant role in turning the attention of American society to the concept of early intervention. Never before had so many individuals -- politicians, professionals, parents -- joined forces with local, state, and federal agencies in a nationwide effort to plan and implement social-educational programs aimed at intervening into the lives of young children and their families. More importantly, these efforts focused on children before they normally reached school age. And further, compensatory education demonstrated that effective intervention is a continuous process (Peterson, 1987).

Compensatory education programs also helped to establish that no one educational approach is necessarily the right or best one for all children. Alternative approaches should be created and encouraged. And finally, compensatory education facilitated a major shift away from traditional ECE practices. Previous practices focused on ECE as serving a socialization/mental health function. ECE could now focus on the intellectual and cognitive development of young children. However, greater accountability for intellectual and cognitive outcomes within educational programs would also be required (Peterson, 1987).

Early Childhood Special Education

Early Childhood Special Education (ECSE) is a relatively new field in education, serving the needs of young children from birth to age 5 who have or are at risk of developing disabilities. ECSE grew out of three parent fields -- early childhood education, compensatory education, and special education. The first two sections of this paper historically reviewed early childhood education and compensatory education. This next section briefly reviews the history of special education and in more depth, the history and the issues pertinent to special education for young children. For a comprehensive review of special education, the reader is referred to Hewett and Forness (1977), Jordan (1976), and Peterson (1987).

Special education services for handicapped children slowly and gradually expanded from the 1800s to post-World War II. During this time, institutions and residential schools were established for the deaf, blind, and mentally retarded. By the 1920s, over two-thirds of the large cities in the U.S. had special class programs but they served only a small number of children. While the programs continued to expand until 1930, large-scale institutionalization and segregation of the handicapped replaced most of the special public school classes in the 1930s and 1940s. The residential schools and institutions became terribly overcrowded and understaffed and focused primarily on custodial care rather than training as was originally intended. Given the poor economic conditions of the time and the prevailing philosophy that intelligence was fixed by heredity and thus unchangeable, education for the handicapped, and in particular the retarded, was considered to be of very little value (Peterson, 1987). This attitude, however, shifted as the effects of World War II were realized.

Tens of thousands of young men and women were screened and tested for military service, but a large number of them were found to be physically, mentally, or behaviorally handicapped. This alarming reality concerned government officials and the general public. When the war ended and thousands returned disabled, many Americans became more accepting of handicapped people and more sensitive to their predicament (Peterson, 1987).

Parents of handicapped children also became more vocal, and many formed national parent organizations, such as the National Association for Retarded Children, United Cerebral Palsy Association, and the American Foundation for the Blind. As a united front, the parents began to pressure state and local agencies to respond to the needs of their handicapped children. They organized early intervention programs for infants and preschoolers, sheltered workshops for older adolescents, community programs for unserved groups of moderately and severely impaired students, and worked to improve substandard conditions in state institutions (Peterson, 1987).

Then in 1954, the U.S. Supreme Court ruled in Brown v. Board of Education that racial segregation in the public schools violated the Fourteenth Amendment. In addition, the court ruled that separate but equal educational facilities were inherently unequal. Speaking about education as the most important function of state and local governments, the court said "Such an opportunity [education], where the state has undertaken to provide it, is a right which must be available to all on equal terms" (Brown v. Board of Education, 1954).

Soon after this decision, a letter was sent to the editor of Children Limited, a newsletter of the National Association for Retarded Children. Its author stated there was a relationship and importance of the Brown decision for handicapped children: "You will recognize, I am sure, that this statement of equal opportunity applies to the handicapped as it does to the minorities" (Zettel & Ballard, 1979, p. 27).

Sixteen years, however, passed before the concept of equal educational opportunity was judicially applied to handicapped children. In 1971, the Pennsylvania Association for Retarded Children (PARC) brought a class action suit against the Commonwealth of Pennsylvania, alleging its failure to provide a publicly supported education for all its school-aged retarded children (PARC v. Commonwealth of Pennsylvania, 1971).

The PARC case was resolved by consent agreement and specified that:

> the state could not apply any law that would postpone, terminate, or deny mentally retarded children access to a publicly supported education, including a public school program, tuition or tuition maintenance, and homebound instruction (PARC v. Commonwealth of Pennsylvania).

The state was required to locate and identify all school-aged retarded children excluded from the public school and to place them in a "free public program of education and training appropriate to (their) capacity" (PARC v. Commonwealth of Pennsylvania). Further, the agreement specified that local districts that provided preschool programs for nonhandicapped children were required to provide preschool programs for mentally retarded children as well.

Over the next three and one-half years, 47 similar right-to-education cases took place in 28 different states and the District of Columbia (Abeson, 1972). From a judicial perspective, the right of a handicapped child to participate in a publicly supported educational program was no longer to be questioned. By 1975, this principle had been irrefutably established by case law in an overwhelming majority of the states (Zettel & Ballard, 1979).

Shortly after the Brown decision, parents of handicapped children joined forces with professionals and through extensive publicity and political activism, further solidified the handicapped child's right to an education. Coupled with the judicial precedents previously discussed, these activities prompted a variety of state statutes and regulations. By 1972, it was reported that nearly 70% of the states had adopted mandatory legislation requiring the provision of a publicly supported education for all of their handicapped children as defined in their state policies (Abeson, 1972). By 1975, all but two state legislatures had adopted some type of statutory provision calling for the education of at least the majority of their handicapped children (U.S. Congress, Senate, 1975).

The federal government had also been providing financial assistance for the education of the handicapped. In 1965, PL 89-313 amended Title I of the Elementary and Secondary Education Act (ESEA) establishing grants to state agencies responsible for providing free public education for handicapped children. This new legislation was designed to assist children in state-operated or -supported schools serving handicapped children who were not eligible for funds under the original act (LaVor, 1976),

Amendments to ESEA in 1966 and 1967 provided funds to the states to expand directly or through the LEAs, programs and projects to meet the special educational and related needs of handicapped children, established the National Advisory Committee on Handicapped Children, and established deaf/blind centers and regional resource centers to provide testing to determine special educational needs of handicapped children (LaVor, 1976).

Then in 1968 the early intervention movement for young handicapped children officially began when the Handicapped Children's Early Education Assistance Act (HCEEA), PL 90-538, became law. HCEEA was designed to establish experimental preschool and early education programs for young handicapped children that could serve as models for state and local educational agencies. Congress allocated monies to develop demonstration projects that would design strategies for training staff, evaluating children's progress, and assessing the outcomes (LaVor, 1976; DeWeerd & Cole, 1976; and Peterson, 1987).

According to Peterson (1987), HCEEA was significant for several reasons. First, it was considered a landmark piece of legislation in that it dealt exclusively with education of handicapped children without being attached to another legislative bill. Second, it provided funds to stimulate and improve upon programs for young handicapped children and their parents. Third, HCEEA initiated the development of exemplary model programs for early intervention with handicapped preschoolers and their parents. And fourth, it initiated nationwide demonstration, training, and dissemination activities.

Unlike Head Start that established wide-scale service programs, the purpose of HCEEA was to experiment with procedures for working with young handicapped children, identify the most effective procedures, and then devise innovative models that could be replicated in other communities. Three-year grants were awarded to projects across the country to develop "First Chance" or "HCEEP (Handicapped Children's Early Education Program) Demonstration Projects". Since 1968, over 500 HCEEP models have been developed, several of which have been validated as successful programs by the Joint Dissemination Review Panel of the National Diffusion Network. Programs or models that receive this distinction must present evidence of their effectiveness in terms of context, procedures, and child gains (Peterson, 1987; Sopris West & National Dissemination Study Group, 1988).

Around the same time that HCEEA was signed into law, SEAs began to define certification requirements and guidelines for teachers of young handicapped children and undergraduate and graduate training programs for ECSE in colleges and universities were created (Hirshoren & Umansky, 1977; Peterson, 1987). The U.S. Bureau of Education for the Handicapped also began awarding grants to university departments of special education to support teacher training in ECSE. In 1974, ECSE became one of the Bureau's top funding priorities. These federal funds made it possible for the creation of separate training programs that focused specifically on the education of

infant and preschool-aged handicapped youngsters (Peterson, 1987).

Another boost to ECSE came in 1972 when the Economic Opportunity Amendments, PL 92-424, mandated that Head Start services be made available to handicapped children from low-income families. This enhanced the growth of ECSE in a number of ways. First, Head Start's national attention brought visibility to the needs of young handicapped children. Second, Head Start's philosophy of comprehensive services to young children and their families brought multidisciplinary professional efforts together on behalf of special needs children. Third, Head Start was a well recognized advocate for early intervention with young handicapped children. And fourth, a significant amount of financial resources from Head Start went into its programmatic efforts for handicapped children and their parents (Peterson, 1987).

A professional organization for ECSE was also established in the early 1970s. In 1973, the Council for Exceptional Children (CEC) created the Division for Early Childhood (DEC). This division was the first formal organization for professionals and parents concerned with issues pertaining to young handicapped children. In 1977, DEC produced its own professional journal, the Journal of the Division for Early Childhood whose exclusive attention was devoted to topics of this new field (Peterson, 1987).

The early 1970s also saw the federal government create State Implementation Grants. These grants provided incentives for state and local community officials to begin systematic planning and program development in ECSE. Since handicapped preschoolers were below the age of normal school-age admission, responsibility for these programs was not automatically given to nor accepted by SEAs or LEAs (Peterson, 1987).

The next major event that affected handicapped children in general, and young handicapped children in particular, was the enactment of the Education for All Handicapped Children Act of 1975, PL 94-142. This mandate became a matter of precise national policy, combining an educational bill of rights for handicapped children with a promise of increased federal financial assistance (Zettel & Ballard, 1979).

Because of PL 94-142, handicapped children won more than the right to a free public education. They also won the right to non-discriminatory testing, evaluation, and placement procedures; the right to be educated in the least restrictive environment; the right to procedural due process of law; and the right to an appropriate education (Education for All Handicapped Children Act, 1975).

For young handicapped children and the field of ECSE, PL 94-142 significantly enhanced both. The law gave formal endorsement to programs for handicapped youngsters under the age of 5 by permitting states to serve the 3- to 5-year-old population and receive federal funds for these programs providing that state law did not prohibit the use of public funds for handicapped children in this age group. The law also established the LEAs as the authorized agencies for serving preschool populations and encouraged states and local school districts to provide services to young handicapped children by offering incentive monies (Preschool Incentive Grants) to those states that elected to do so (Education for All Handicapped Children Act, 1975).

Additional support for ECSE occurred in 1983 when the Amendments to PL 94-142 were passed under PL 98-199. This law created State Planning Grants for states to develop and implement comprehensive plans for ECSE for all handicapped children from birth to age 5. Further, it allowed states to use funds received under the Preschool Incentive Grants for services for infants and toddlers, from birth to age 3 (Weintraub & Ramirez, 1985).

The most significant piece of federal legislation that has affected young handicapped children was the 1986 enactment of the Education of the Handicapped Act Amendments, PL 99-457. In part, the law requires that by the 1990-91 school year, all states applying for PL 94-142 funds will have to assure that they are providing a free appropriate public education to all handicapped children ages 3 through 5. Further, PL 99-457 establishes a new state grant program for handicapped infants and toddlers. The legislation defines the eligible population as all children from birth through age 2 who are developmentally delayed (criteria to be determined by each state), or with conditions that typically result in delay, or, at state discretion, are at risk of developing substantial developmental delay (Council for Exceptional Children [CEC], 1986).

The law also stipulates that federal funds under the program may be used for the planning, development, and implementation of statewide systems for providing early intervention services as well as for general expansion and improvement of services. Federal funds, however, are not to be used if there are other appropriate resources, thus emphasizing the law's intent of interagency participation and cooperation (CEC, 1986).

PL 99-457 also reauthorizes experimental, demonstration, and outreach programs (HCEEP), early childhood research institutes to carry out sustained research to generate and disseminate new information on early education, and authorizes a technical assistance developmental system to

provide support to the HCEEP projects and to the SEAs (CEC, 1986).

The significance of PL 99-457 cannot be overstated. While all states had previously participated in the Education for All Handicapped Children Act, PL 94-142, and received federal funds for their school-aged special education students, not all states have specific legislation requiring programs for handicapped 3- to 5-year-olds. Many states permit LEAs to develop ECSE programs for their 3- to 5-year-old handicapped children. Under the provisions of PL 99-457, states who choose to not provide a free appropriate public education to all handicapped 3- to 5-year-olds will lose all monies generated under the larger PL 94-142 formula by the 3- to 5-year-old population served, all grants and contracts related to preschool special education, and the new Preschool Grant (CEC, 1986).

An example best illustrates this point. Indiana, as with 36 other states, does not require school districts to provide services to handicapped 3- to 5-year-olds. Rather, school districts are permitted to do so (L.A. Bond, personal communication, September 13, 1988). As of June, 1988, approximately 230 Indiana children, ages 3 and 4, were served in public school special education programs. Based on Indiana Department of Education child count and funding projections for the 1990-91 school year, Indiana could lose $9.6 million in federal funds should it not pass legislation mandating ECSE programs for 3- to 5-year-olds (P. Ash, Indiana Department of Education internal memorandum, June 10, 1988, supplied by L. Bond).

According to the National Association of State Directors of Special Education (NASDSE), the incentive provided by PL 99-457 to encourage states to serve their 3- to 5-year-old handicapped population may result in an additional 30,665 youngsters receiving needed special educational services in the first year of implementation (1987-88). These results, along with estimates of an additional 23,000 children to be served for 1988-89, "demonstrate clearly the importance states place on preschool education, and the willingness and readiness of states and local school systems to expand services to meet the needs of 3- to 5-year-old children with handicaps" (National Association of State Directors of Special Education [NASDSE], 1988, p. 2).

Additional significant elements of PL 99-457 are found in its provisions in Part H, the infants and toddlers section. First, the law encourages states to include at-risk children in addition to those identified as handicapped or developmentally delayed. As of May, 1988, 14 states had decided that

infants and toddlers who are at risk will be served while several others reported that services to at-risk children will be provided on a pilot basis in order to determine future state policy (NASDSE, 1988).

Second, the act stipulates that the governor of each state participating in the new grant program must designate a lead agency for overall administration of the program and establish an Interagency Coordinating Council composed of relevant agencies, consumers, and providers.

While the states have an opportunity to embark on a new and challenging interagency collaborative effort to provide comprehensive, coordinated, multidisciplinary early intervention services for handicapped and at-risk infants and toddlers and their families, the effort is not without problems. Financing services to be provided, that is, which agency should be responsible for a given service and under what circumstances should private funds be included in the system, has already developed as a major problematic issue. In addition, confidentiality and the release of information among agencies has become a major problem for some states (NASDSE, 1988). NASDSE recommends that assistance in both of these areas, financing and confidentiality, could be provided by the new Federal Interagency Coordinating Council authorized by PL 99-457.

The third significant element in Part H of PL 99-457 is the requirement for a written Individualized Family Service Plan (IFSP) developed by a multidisciplinary team and the parents. Similar to the Individualized Educational Plan (IEP), the IFSP, in part, must contain a statement of the child's present levels of development and the criteria, procedures, and timelines for determining progress. The major differences between the two plans is that the IFSP must include a statement of the family's strengths and needs relating to enhancing the child's development, a statement of major outcomes expected to be achieved for the child and family, and the specific early intervention services necessary to meet the unique needs of the child and family (CEC, 1986).

Clearly, emphasis on family involvement is intended. However, ethics and confidentiality may be two issues service-providers may have to deal with as they provide services to handicapped and at-risk infants and toddlers and their families.

* * *

To summarize, special education has had a long and gradual development since the first class for the deaf was established in 1869 (Peterson, 1987). But the field of early childhood special education has literally mushroomed in the last 20 years due to the collective efforts of parents, professionals, and politicians all working together to enact sweeping reforms to change the lives of young children with special needs.

Early childhood special education also contributed a great deal to the concept of early intervention:

- the inclusion of parents as primary sources about their children's needs and abilities and as partners in the delivery of service;
- multidisciplinary assessments and services for children and their families;
- interagency coordination of services;
- frequent evaluation of progress made by children and their families; and
- alternative approaches to intervention.

As was the case for early childhood education and compensatory education, early childhood special education benefitted from theory, empirical research, expert opinion, and our societal values regarding early intervention. The next and final section of this paper reviews the contributions of selected theorists, researchers, and experts who laid the groundwork for a rationale for early intervention.

The Rationale for Early Intervention

Contributions from theory, research, expert opinion, and societal values have all contributed to forming a rationale for early intervention (Peterson, 1987). For example, theories about learning and the importance of development in the early years offer one source of support. Research on human growth and development and the factors that either facilitate or inhibit cognitive functioning provide another source of support. Expert opinion, the positions taken by recognized authorities, are usually based on research or theoretical evidence and often reflect logical analyses of societal needs or issues and alternative strategies for resolving them. This is a third source of support. And finally, the values held by society or an influential subgroup concerning our nation's obligations to the

educational welfare of its children are a final source of support for early intervention (Peterson, 1987).

Contributions from societal values have already been covered throughout previous sections of this paper. This next section discusses selected contributions from theory, research, and expert opinion in forming a rationale for early intervention. Contributions are presented according to Peterson's (1987) eight major premises for early intervention.

Premise I. During the early years the initial patterns of learning and behavior that set the pace for and influence the nature of all subsequent development are established (Peterson, 1987, p. 5).

The early years of life are extremely important to the overall growth and development of children. Summarizing 1,000 research studies that were conducted over 50 years that examined child development, Bloom (1964) concluded that the studies:

> make it clear that intelligence is a developing function and that the stability of measured intelligence increased with age. Both types of data suggest that in terms of intelligence measured at age 17, from conception to age 4 the individual develops 50% of his mature intelligence, from ages 4-8 he develops another 30%, and from ages 8-17 the remaining 20% (p. 88).

Additional researchers who have contributed to this concept of the importance of the early years include Gesell (1923), Piaget (1960, 1963), Jensen (1967), and White (1979).

Further, it has been found that the importance of early learning as a foundation for subsequent learning is especially significant for those children considered to be at risk, disadvantaged, or handicapped. With deprived or inadequate experience, a lack of prerequisite skills, and less knowledge, deficiencies tend to increase and become compounded as the child grows older. Important researchers who have contributed to this body of knowledge around "progressive or cumulative achievement decrements" include Jensen (1966), Bereiter and Englemen (1966), Sameroff (1975), Bricker and Iacino (1977), Hayden and McGinnis (1977), Palmer and Siegel (1977), Ramey and Baker-Ward (1982), and Levin (1987). All of these researchers note that for children who fall behind their peers in certain areas, learning must be accelerated to a faster than normal rate if they are ever to catch up.

Premise 2. **Research suggests the presence of certain critical periods, particularly during the early years, when a child is most susceptible and responsive to learning experiences** (Peterson, 1987, pp. 5-6).

Critical periods, according to Horwitz and Paden (1973), are the times when certain stimuli must be presented or special experiences must occur for a particular pattern of responses to develop. Development is occurring very rapidly and children are especially vulnerable to the effects of depriving or optimal environments (Peterson, 1987). Research on the importance of critical periods and their relationship to intelligence, personality, language, and a sense of self includes, among others, the works of Caldwell (1962), Denenberg (1964), Mussen, Conger, Kagan and Huston (1984), Ainsworth (1969), Bloom (1964), Bowlby (1969), Erickson (1963), Piaget (1960, 1963), White (1975), Hayden and McGinnis (1977), and Jensen (1966).

Premise 3. **Intelligence and other human capacities are not fixed at birth but, rather are shaped to some extent by environmental influences and through learning** (Peterson, 1987, p. 6).

At the core of every early intervention effort is the concept that intelligence and other human characteristics are not fixed at birth. Rather, they are shaped through learning and environmental influences. As was discussed in the previous section of this paper on ECSE, this concept was not always believed and resulted in thousands of mentally retarded children going unserved. But considerable evidence has accumulated over the past 40 years that has refuted the notion of fixed intelligence and supports intervening early in young children's lives and their environments.

Research studies conducted on IQ changes as a result of environmental factors include, among others, those by Skeels and Dye (1939), Skeels (1966), Kirk (1958, 1973, 1977), Casler (1968), Caster (1971), Ramey and Haskins (1981), and Ramey, Bryant, and Suarez (1985).

Premise 4. **Handicapping conditions and other factors that render a child at risk for developmental disabilities can interfere with development and learning so that the original disabilities become more severe and secondary handicaps will appear** (Peterson, 1987, p. 6).

According to Peterson (1987), children with diagnosed handicaps, such as cerebral palsy, Down Syndrome, blindness, etc., require immediate intervention as some type of impairment is clearly a reality. In contrast, children who are at risk for developmental disabilities, such as those with low birth weight, from a deprived environment, or who have mild sensory losses may show no initial handicap, per se, but may develop disabilities later.

For both groups of children, those with identified disabilities and those who are at risk of disabilities, research has shown that early intervention can have a positive impact on reducing the severity of the disabilities and may improve the chances for later successful performance and achievement (see Caldwell, 1973; Bayley, Rhodes, Gooch, & Marcus, 1971; Hayden & Haring, 1974; Koch, 1958; Jones, Wenner, Toczek, & Barrett, 1962; Downs, 1971; Northcott, 1973; Love, 1970; Francis-Williams, 1974; Guldager, 1974; and Mayer 1974a, 1974b, 1974c).

Premise 5. **A child's environment and early experiences, particularly the degree to which these are nurturing or depriving, have a major effect upon development and learning; both greatly influence the degree to which a child reaches his or her full potential** (Peterson, 1987, p. 6).

The environments in which children live will either help maintain their status quo or foster change. What this means is that some environments are sufficiently neutral that they do nothing more than sustain whatever developmental pattern is spontaneously evident in the child. Deprived environments fail to produce the kinds of stimulation needed to produce more rapid rates of learning. Positive environments tend to promote children's intellectual development (Peterson, 1987).

Peterson (1987) further noted that according to Bloom (1964):

> differences among children in general intelligence are related to the extent the environment provides: (a) stimulation that fosters verbal development, (b) pleasurable consequences for verbal-reasoning accomplishments, and (c) encouragement for problem solving, exploration, and skill learning (Peterson, 1987, p. 28).

Additional selected studies on environment and its impact on child learning include research conducted by Yarrow (1970), Provence and Lipton (1962), Rubenstein (1967), Casler (1968), Skeels and Dye (1939), Skeels (1966), and Kirk (1958, 1973, 1977).

Premise 6. **Early intervention programs can make a significant difference in the developmental status of young children and can do so more rapidly than later remedial efforts after a child has entered elementary school** (Peterson, 1987, p. 6).

Research on the effects of early intervention programs has grown considerably since Kirk's landmark study in 1949 (Kirk, 1958). For example, studies that demonstrated early intervention is successful in generating and maintaining high rates of developmental progress in Down Syndrome children include those conducted by Hayden and Dmitriev (1975) and Clunies-Ross (1979).

Other studies have documented positive outcomes from early intervention programs with deaf or hearing impaired infants and preschoolers (Simmons-Martin, 1981) and handicapped or at-risk infants (Badger, Burns, & DeBoer, 1982; Trohanis, Cox, & Meyer, 1982). Further, two major national studies examined the outcomes of the HCEEP Model Intervention Programs for handicapped children (Stock, Wnek, Newborg, Schenck, Gabel, Spurgeon, & Ray, 1976; Reaves & Burns, 1982).

And two national reviews of early intervention research reported on child outcomes across many independent early childhood programs for disadvantaged children. One study conducted by Bronfenbrenner (1974) summarized research findings from two types of early intervention programs: (1) home-based, in which the program was conducted in the home by trained people who made home visits and worked with the child, parents, or both and (2) center-based, in which the program was conducted in group preschool settings outside the home. Bronfenbrenner found that children from both types of programs showed gains, however, declines were evident once the programs were terminated. In addition, parent involvement was found to be a critical factor relating to the success of the programs.

A group of 11 independent researchers conducted the second national review on early intervention. Known as the Consortium for Longitudinal Studies (previously known as the Consortium on Developmental Continuity), the researchers collaborated by pooling their initial data and designing a common follow-up study. The original data were analyzed and all new data in the follow-up study were analyzed by an independent research group at Cornell University which had not itself designed and carried out an experimental preschool. At the time of the follow-up in 1976-77, the low-income preschool graduates were 9 to 19 years of age. Among the findings were that preschool graduates were retained less often in grade, they needed less special education in later

grades, and preschool intervention made a positive contribution to later school achievement for low-income children (Lazar and Darlington, 1979; Lazar, Hubbell, Murray, Rosche, & Royce, 1977).

However, the most significant study was conducted on 123 disadvantaged preschoolers who participated in the Perry Preschool Project in Ypsilanti, Michigan, beginning in 1962. Designed as a longitudinal study to answer the question, "Can high quality early childhood education help to improve the lives of low-income children and their families and the quality of life of the community as a whole?" (Berrueta-Clement, et al., 1984, p. xiii), four of the five phases of the study were completed by 1984. At that time, data were collected on study participants who were then 19 years of age.

The significance of the study cannot be overstated. According to the National Conference of State Legislatures, the Perry Preschool Project is the most often quoted research that has influenced state legislative support for early intervention (Gnezda & Sonnier, 1988). Thus, its findings are summarized here.

Both short- and long-term academic and social benefits were demonstrated. Children who participated in the project performed better academically through secondary school than did children in the control group. The preschool group also had better school attendance rates and spent less time in special education classes. Further, two out of three preschool students graduated from high school in contrast to only one of two non-preschool students. Those who attended preschool were also more likely to enroll in some form of further education or vocational training after graduating from high school. Preschool also led to higher levels of employment, less unemployment, and higher earnings by age 19 for the study subjects. Preschool subjects also had fewer contacts with the criminal justice system than did the non-preschool group, including fewer arrests. Further, female study participants had fewer pregnancies and births than did non-preschool females (Berrueta-Clement et al., 1984).

An extensive cost-benefit analysis was also performed on the Perry Preschool Program and its long-term effects (Barnett, 1985). Results indicated that $4 to $7 was saved for every $1 spent. These cost savings were seen in decreased spending for special and remedial education, social welfare, and criminal justice programs. Increased tax revenue was also generated through higher earnings by the preschool group once they entered the labor market.

Premise 7. **Parents need special assistance in establishing constructive patterns of parenting with a young handicapped or at-risk child and in providing adequate care, stimulation, and training for their child during the critical early years when basic developmental skills should be acquired** (Peterson, 1987, p. 6).

Skill in parenting is not something with which an individual is born. When one adds the complications of poverty, single-parenting, parenting as a teenager, or the birth of a child with special needs or who is at risk of developing disabilities, parenting becomes more complex and problems are compounded.

Support for parent involvement and training is found in research studies including those conducted by White (1975), Gesell (1925), Brazelton, Kozlowski, and Main (1974), Bailey and Simeonsson (1984), Zigler and Valentine (1979), and Lazar (1981).

Premise 8. **Early intervention implies some economic-social benefits in that prevention or early treatment of developmental problems in young children may reduce more serious, burdensome problems for society to cope with later, including their accompanying costs** (Peterson, 1987, p. 6).

As has already been discussed, the cost-savings of early intervention are significant when one looks at the analysis of the Perry Preschool Project. Other studies that have looked at the potential economic benefits of early intervention based upon data collected from studies of various infant and preschool intervention programs include those conducted by Wood (1981) and Antley and DuBose (1981). No doubt, as more and more state monies are spent on early intervention/early childhood education programs, data to determine cost and benefits will also be collected.

Summary

This paper reviewed the history of three separate yet related fields of education which formed the roots of early intervention: a) early childhood education and its movements -- kindergarten, Montessori, nursery school, and day-care; b) compensatory education; and c) early childhood special education. Further it discussed the contributions of societal values regarding early intervention and selected theorists, researchers, and experts who provided the rationale for early intervention and influenced the development of these three fields of education for young children. Collectively, the events and individuals discussed here have contributed to a Zeitgeist, the trend of thought and feeling that early intervention indeed is a viable strategy to reduce or eliminate the risk of academic failure for large numbers of children.

REFERENCE LIST

Abelson, W. D., Zigler, E., & DeBlasi, C. L. (1974). Effects of a four-year Follow-Through program on economically disadvantaged children. Journal of Educational Psychology, 66, 756-771.

Abeson, A. (1972). Movement and momentum: Government and the education of handicapped children. Exceptional Children, 39, 63-66.

Ainsworth, M. (1969). Object relation, dependency, and attachment: A theoretical review of the infant-mother relationship. Child Development, 40, 965-1025.

Antley, T. R., & DuBose, R. F. (1981). A case for early intervention: Summary of program findings, longitundinal data, and cost-effectiveness. Unpublished manuscript. (Available from University of Washington, Experimental Education Unit, Seattle).

Badger, E., Burns, D., & DeBoer, M. (1982). An early demonstration of educational intervention beginning at birth. Journal of the Division for Early Childhood, 5, 19-30.

Bailey, D. B., Jr., & Simeonsson, R. J. (1984). Critical issues underlying research and intervention with families of young handicapped children. Journal for Division of Early Childhood, 9(1), 38-48.

Barnett, W. S. (1985). The Perry Preschool Program and its long-term effects: A benefit-cost analysis. Ypsilanti, MI: High/Scope Educational Research Foundation.

Bayley, N., Rhodes, L., Gooch, B., & Marcus, M. (1971). Environmental factors in the development of institutionalized children. In J. Hellmuth (Ed.), The exceptional infant (Vol. II). New York: Brunner/Mazel.

Bereiter, C., & Engleman, S. (1966). Teaching disadvantaged children in the preschool. Englewood Cliffs, NJ: Prentice-Hall.

Berrueta-Clement, J. R., Schweinhart, L. J., Barnett, W. S., Epstein, A. S., & Weikart, D. P. (1984). Changed lives: The effects of the Perry Preschool Program on youths through age 19. Ypsilanti, MI: High/Scope Press.

Bloom, B. S. (1964). Stability and change in human characteristics. New York: John Wiley & Sons.

Bowlby, J. (1969). Attachment and loss: Attachment. (Vol. 1). New York: Basic Books.

Braun, S. J., & Edwards, E. P. (1972). History and theory of early childhood education. Worthington, OH: Charles A. Jones.

Brazelton, T. B., Koslowski, B., & Main, M. (1974). The origins of reciprocity: The early mother-infant interaction: In M. Lewis & L. Rosenblum (Eds.), The effect of the infant on its caregiver. New York: John Wiley & Sons.

Bredekamp, S. (Ed.). (1987). Developmentally appropriate practice in early childhood programs serving children from birth through age 8. Washington, DC: National Association for the Education of Young Children.

Bricker, D. D., & Iacino, R. (1977). Early intervention with severely/profoundly handicapped children. In E. Sontag (Ed.), Educational programming for the severely/profoundly handicapped. Reston, VA: Council for Exceptional Children.

Bronfenbrenner, U. (1970). Two worlds of childhood: U.S. and U.S.S.R. New York: Russell Sage Foundation.

Bronfenbrenner, U. (1974). A report on longitudinal evaluations of preschool programs, Volume II: Is early intervention effective? (DHEW Publication No. OHD 76 30025). Washington, DC: U.S. Government Printing Office.

Brown v. Board of Education. (1954). 347 U.S. 483.

Brown, S. J., & Edwards, E. P. (1972). History and theory of early childhood education. Belmont, CA: Wadsworth Publishing.

Caldwell, B. M. (1962). The usefulness of the critical period hypothesis in the study of filative behavior. Merrill-Palmer Quarterly, 8, 229-237.

Caldwell, B. M. (1973). The importance of beginning early. In J. Jordan R. F. Dailey (Eds.), Not all little wagons are red. Reston, VA: Council for Exceptional Children.

Carlson, J. M. (1972). Effects of different Head Start program approaches on children of different characteristics: Report on analysis of data from 1966-67 and 1967-68 national evaluations. (Technical Memorandum TM4862001/00). (ERIC Document Reproduction Service No. ED 072 859). Santa Monica, CA: Systems Development Corp.

Casler, L. (1968). Perceptual deprivation in institutional settings. In G. Newton & S. Levine (Eds.), Early experience and behavior. Springfield, IL: Charles C. Thomas.

Caster, L. (1971). Maternal deprivation: A critical review of the literature. Monographs of the society of research in child development, 26, (2, Serial No. 80).

Children's Defense Fund. (1987). Childcare: The time is now. Washington, DC: Author.

Clunies-Ross, G. G. (1979). Accelerating the development of Down's Syndrome infants and young children. Journal of Special Education, 13(2), 169-177.

Cohen, S. (1968). Educating the children of the urban poor: Maria Montessori and her method. Education and Urban Society, 1, 61-79.

Committee for Economic Development. (1987). Children in need: Investment strategies for the educationally disadvantaged. New York: Author, Research and Policy Committee.

Connell, D. R. (1987). The first 30 years were the fairest: Notes from kindergarten and the ungraded primary (K-12). Young Children, 42(5), 30-37.

Consortium for Longitudinal Studies. (1978). Lasting effects after preschool, final report. Washington, DC: U.S. Government Printing Office.

Consortium for Longitudinal Studies. (1981). Persistence of preschool effects: Status, stress, and coping skills, final report. Washington, DC: U.S. Government Printing Office.

Coulson, J. M. (1972). Effects of different Head Start program approaches on children of different characteristics: Report on analysis of data from 1966-67 and 1967-68 national evaluations (Technical Memorandum TM 4862001/00). Santa Monica, CA: Systems Development Corp. (ERIC Document Reproduction Service No. ED 072 859).

Council for Exceptional Children. (1986). New federal preschool program under PL 99-457. (Paper prepared by Department of Governmental Relations). Reston, VA: Author.

Council of Chief State School Officers. (1987a). Children at risk: The work of the states. Washington, DC: Author.

Council of Chief State School Officers. (1987b). Assuring school success for students at risk: A council policy statement. Washington, DC: Author.

Council of Chief State School Officers. (1987c). Elements of a model state statute to provide educational entitlements for at-risk students. Washington, DC: Author.

Datta, L. (1979). Another spring and other hopes: Some findings from national evaluations of Project Head Start. In E. Zigler & J. Valentine (Eds.). Project Head Start: A legacy of the war on poverty. New York: Free Press.

Day, B. B., & Thomas, T. S. (1988). Public school programs for young children: Who, where, what, why, and how. Principal, 67(5), 24-27.

Denenberg, V. H. (1964). Critical period, stimulus input, and emotional reactivity. Psychological Review, 71, 335-351.

Department of Health and Human Services. (1986). Head Start: A child development program. Washington, DC: Author, Office of Human Development Services Administration for Children, Youth, and Families, Head Start Bureau.

DeWeerd, J., & Cole, A. (1976). Handicapped children's early education program. Exceptional Children, 43, 155-157.

Downs, M. P. (1971). Overview of the management of the congenitally deaf child, symposium on congenital deafness. In N. E. Ellis & L. Cross (Eds.), Planning programs for early education of the handicapped. New York: Walker and Company.

Duncan, G. J. & Rodgers, W. L. (1985). The prevalence of childhood poverty. Ann Arbor: University of Michigan, Survey Research Center.

Dunteman, G. (1972, July). A report on two national samples of Head Start classes: Some aspects of child development of participants in full year 1967-1968 and 1968-1969 programs. (Contract HEW 0570207). Research Triangle Park, NC: Research Triangle Institute.

Education for All Handicapped Children Act, PL 94-142. (1975). 20 U.S.C. 1401.

Egeland, B., & Sroufe, L. A. (1981). Attachment and early maltreatment. Child Development, 52, 44-52.

Elkind, D. (1986). Formal education and early childhood education: An essential difference. Phi Delta Kappan, 67, 631-636.

Emmerich, W. (1971). The structure and development of personal-social behaviors in preschool settings. (ERIC Reproduction Service No. ED 063 971). Princeton, NJ: Educational Testing Service.

Epstein, A. S. (1985). Overview. In L. J. Schweinhart & D. P. Weikart (Eds.). Quality in early childhood programs: Four perspectives. (High/Scope Early Childhood Policy Papers, No. 3). Ypsilanti, MI: High/Scope Educational Research Foundation.

Erickson, E. H. (1963). Childhood and society (2nd ed.) New York: W. W. Norton.

Evans, E. D. (1971). Contemporary influences in early childhood education. New York: Holt, Rinehart, and Winston.

Francis-Williams, J. (1974). Children with specific learning difficulties. Oxford, England: Pergamon Press.

Galinsky, E. (1986). Investing in quality child care: A report for AT&T. New York: Bank Street College of Education.

Gesell, A. (1923). The pre-school child from the standpoint of public hygiene and education. Boston: Houghton Mifflin.

Gesell, A. (1925). The mental growth of the pre-school child. New York: Macmillan.

Gnezda, T., & Robinson, S. (1986). State approaches to early childhood education. (State Legislative Report, Vol. 11, No. 14). Denver, CO: National Conference of State Legislatures.

Gnezda, T., & Sonnier, C. (1988). Early childhood education: The status of state involvement (State Legislative Report, Vol. 13, No. 16). Denver, CO: National Conference of State Legislatures.

Gold, D. L. (1988, October 5). Chiefs unit sets broader approach for states on young's 'basic needs'. Education Week, p. 1.

Gold, D. L. (1988, October 19). Child-care bill, parental leave die in Congress. Education Week, p. 1.

Goodman, I. F., & Brady, J. P. (1988). The challenge of coordination: Head Start's relationship to state-funded preschool initiatives. Newton, MA: Educational Development Center.

Grub, W. N. (1987). Young children face the states: Issues and options for early childhood programs. New Brunswick, NJ: Center for Policy Research in Education.

Guldager, L. (1974). The deaf and blind: Their education and their needs. In S. A. Kirk & F. E. Lord (Eds.) Exceptional children: Educational resources and perspectives. Boston: Houghton Miffin.

Hausman, B. S., & Weiss, H. B. (1988). State-sponsored family education: The case for school-based services. Community Education Journal, 15(2), 12-15.

Hayden, A. & Haring, N. (1974). Programs for Down's Syndrome children. Paper presented at Early Intervention with High Risk Infants and Young Children Conference. Chapel Hill, NC: University of North Carolina at Chapel Hill.

Hayden, A. H. & Dmitriev, V. (1975). The multidisciplinary preschool program for Down's syndrome children at the University of Washington Model Preschool Center. In B. Z. Friedlander, G. M. Sterritt, & G. E. Kirk (Eds.), Exceptional infant -- Assessment and intervention. (Vol. 3). New York: Brunner/Mazel.

Hayden, A. H., & McGinnis, G. D. (1977). Bases for early intervention. In E. Sontag (Ed.), Educational Programming for the severely/profoundly handicapped. Reston, VA: Council for Exceptional Children.

Hewett, F. M., & Forness, S. R. (1977). Education of exceptional learners. (2nd ed.). Boston: Allyn & Bacon.

Hill, P. S. (1987). The function of kindergarten. Young Children, 42(5), 12-19.

Hills, T. W. (1987). Children in the fast lane: Implications for early childhood policy and practice. Early Childhood Research Quarterly, 2, 265-273.

Hirshoren, A., & Umansky, W. (1977). Certification for teachers of preschool handicapped children. Exceptional Children, 44, 191-193.

Hodgkinson, H. L. (1985). All one system: Demographics of education -- kindergarten through graduate school. Washington, DC: Institute for Educational Leadership.

Horowitz, F. D., & Paden, L. Y. (1973). The effectiveness of environmental intervention programs. In B. M. Caldwell & H. N. Riccinti (Eds.), Review of child development research: Child development and social policy (Vol. 3). Chicago: University of Chicago Press.

Jensen, A. (1966). Cumulative deficit compensatory education. Journal of School Psychology, 4, 137-147.

Jensen, A. R. (1967). Learning in the Preschool Years. In W. W. Hartrup, & N. L. Smothergill (Eds.). The young child: reviews of research. Washington, DC: National Association for the Education of Young Children.

Jones, M. H., Wenner, W. H., Toczek, A. M., & Barrett, M. L. (1962). Prenursery school program for children with cerebral palsy: Follow-up of 64 children. Journal of American Medical Women's Association, 17, 713-719.

Jordan, J. (1976). Exceptional child education at the bicentennial: A parade of progress. Reston, VA: Council for Exceptional Children.

Kagan, S. L. (1989). Early care and education: Tackling the tough issues. Phi Delta Kappan, 70, 433-439.

Kerch, S. (1989, January 8). Taking care of business, kids. Chicago Tribune, p. 1, section 16.

Kirk, S. A. (1958). Early education of the mentally retarded: An experimental study. Urbana: University of Illinois Press.

Kirk, S. A. (1973, July). The education of intelligence. Slow Learning Child. 20.

Kirk, S. A. (1977). General and historical rationale for early education of the handicapped. In N. E. Ellis & L. Cross (Eds.)., Planning programs for early education of the handicapped. (First Chance Series). New York: Walker.

Kirschner Associates. (1970, May). A national survey of the impact of Head Start centers on community institutions. (ERIC Document Reproduction Service No. ED 046 416). Albuquerque, NM: Author.

Knezevich, S. J. (1984). Administration of public education, (4th Ed.). New York: Harper & Row.

Koch, F. P. (1958). A nursery school for children with cerebral palsy: Five year follow-up study of thirteen children. Pediatrics, 22, 329-335.

Koshel, J. (1985). State investments in human capital. Capital Ideas.

Lavor, M. L. (1976). Federal legislation for exceptional persons: A history. In F. Weintraub (Ed.) Public policy and the education of exceptional children. Reston, VA: Council for Exceptional Children.

Lazar, I. (1981). Early intervention is effective. Educational Leadership, 38, 303-305.

Lazar, I., & Darlington, R. (1979). Summary report: Lasting effects after preschool. (DHEW Publication No. OHDS 80-30179). Washington, DC: U.S. Government Printing Office.

Lazar, I., Hubbell, V. R., Murray, H., Rosche, M., & Royce, J. (1977). The persistence of preschool effects: a long-term follow-up of fourteen infant and preschool experiments. Final Report. (Grant No. 18-76-07843, for Administration on Children, Youth, and Families, DHEW Publication No. OHDS 78-30130). Washington, DC: Dept of Health, Education, and Welfare.

Lazerson, M. (1972). The historical antecedents of early childhood education. In I. J. Gordon (Ed.), Early childhood education: The seventy-first yearbook of the national society for the study of education. Chicago: University of Chicago Press.

Levin, H. M. (1985). The educationally disadvantaged: A national crisis (Program Report No. 85-B1). Philadelphia, PA: Center for State Youth Initiatives of Public/Private Ventures.

Levin, H. M. (1987). Accelerated schools for disadvantaged students. Educational Leadership, 44, 19-21.

Lillard, P. P. (1972). Montessori: A modern approach. New York: Schocken Books.

Love, H. D. (1970). Parental attitudes towards exceptional children. Springfield, IL: Charles C. Thomas.

Majchrzak, A. (1984). Methods for policy research. Beverly Hills, CA: Sage.

Mayer, C. A. (1974a). Understanding young children: The handicapped child in the normal preschool class. (Catalog No. 114). Publications office/IREC. College of Education. Urbana, IL: University of Illinois.

Mayer, C. A. (1974b). Understanding young children: Emotional and behavioral development and disabilities. (Catalog No. 115). Publications Office/IREC. College of Education. Urbana, IL: University of Illinois.

Mayer, C. A. (1974c). Understanding young children: Learning development and learning disabilities. (Catalog No. 116). Publication Office/IREC, College of Education. Urbana, IL: University of Illinois.

McCormick, K. (1986). If early education isn't on your agenda now, it could be -- and soon. The American School Board Journal, 6, 30-34.

McDonald, J. G. (1986). Readiness for the new educational standards. Time for results: Task force on readiness. Washington, DC: National Governors' Association, Center for Policy Research and Analysis.

McDonnell, L. M. (1988). Can education research speak to state policy? Theory into practice, 27, 91-97.

Meisels, S. J. (1987, January). Uses and abuses of developmental screening and school readiness testing. Young Children, 42, 4-6, 68-73.

MIDCO Educational Associates. (1972). Investigation of the effects of parent participation in Head Start, (Report to the Office of Child Development). (ERIC Document Reproduction Service Nos. ED 080 215; ED 080 216; ED 080 218). Denver: Author.

Montessori, M. (1964). The Montessori method. New York: Schocken Books.

Moynihan, D. P. (1986). Family and nation. San Diego, CA: Harcourt, Brace, Jovanovich.

Mussen, P. H., Conger, J. J., Kagan, J., & Huston, A. (1984). Child development and personality (6th ed). New York: Harper & Row.

National Association for the Education of Young Children (NAEYC). (1987). Position statement on standardized testing of young children 3 through 8 years of age. Washington DC: NAEYC.

National Association for the Education of Young Children. (1988a). NAEYC public policy alert. Washington, DC: Author.

National Association for the Education of Young Children. (1988b). ACT for better child care (brochure #560). Washington, DC: Author.

National Association of Early Childhood Specialists in State Departments of Education (NAECS/SDE). (1987). Unacceptable trends in kindergarten entry and placement. Position statement adopted by NAECS/SDE at annual meeting on November 11, 1987, Chicago, IL. Available from early childhood specialists in each state's education agency.

National Association of State Boards of Education. (1988a). The NASBE early education task force. The State Board Connection -- Issues in Brief, 7(3).

National Association of State Boards of Education. (1988b). Right from the start, the report of the NASBE task force on early childhood education. Alexandria, VA: Author.

National Association of State Directors of Special Education. (1988). Liaison Bulletin, 14, No. 4, 1-8.

National Black Child Development Institute, Inc. (1987). Safeguards: Guidelines for establishing programs for four-year-olds in the public schools. Washington, DC: Authors.

National Commission on Excellence in Education. (1983). A nation at risk: The imperative for educational reform. Washington, DC: U.S. Government Printing Office.

National Early Childhood Technical Assistance System [NEC*TAS] and State Technical Assistance Resource Team [START]. (1988). The Head Start Program. (Resource packet) Available from CB#8040, Suite 500 NCNB Plaza, Chapel Hill, NC 27599.

National Governors' Association. (1986). Time for results: The governors' 1991 report on education. Washington, DC: Author, Center for Policy Research and Analysis.

National Governors' Association. (1987a). Results in education: 1987. Washington, DC: Author, Center for Policy Research and Analysis.

National Governors' Association (1987b). The first sixty months. Washington, DC: Author, Committee on Human Resources and Center for Policy Research.

National Governors' Association. (1987c). The first sixty months: The next steps. Washington, DC: Author, Committee on Human Resources, the Center for Policy Research, and the Council of State Governments.

North Central Regional Educational Laboratory (NCREL). (1987). Plan of Work for FY 88 and FY 89. Elmhurst, IL: Author.

Northcott, W. H. (1971). The integration of young deaf children into ordinary educational programs. Exceptional Children, 38, 29-32.

O'Keefe, R. A. (1979). What Head Start means to families. In L. G. Katz (Ed.), Current topics in early childhood education, 2. Norwood, NJ: Ablex.

Osborn, D. K. (1975). Early childhood education in historical perspective. Athens: University of Georgia, Education Associates.

Palmer, F. H., & Siegel, R. J. (1977). Minimal intervention at ages two to three and subsequent intellectual changes. In C. Day & R. K. Parker (Eds.), The preschool in action: Exploring early childhood programs. Boston: Allyn & Bacon.

PARC v. Commonwealth of Pennsylvania. (1971). 343 F. Supp. 279 (Ed. PA, 1972).

Peterson, N. L. (1987). Early intervention for handicapped and at-risk children: An introduction to early childhood special education. Denver CO: Love Publishing Company.

Piaget, J. (1960). The psychology of intelligence. Patterson, NJ: Littlefield, Adams.

Piaget, J. (1963). The origins of intelligence in children. New York: W. W. Norton.

Provence, S., & Lipton, R. C. (1962). Infants in institutions. New York: International Universities Press.

Ramey, C. T., & Baker-Ward, L. (1982). Psychosocial retardation and the early experience paradigm. In D. D. Bricker (Ed.), Intervention with at-risk and handicapped infants: From research to application. Baltimore: University Park Press.

Ramey, C. T., & Haskins, R. (1981). The modification of intelligence through early experience. Intelligence, 5, 5-19.

Ramey, C. T., Bryant, D., & Suarz, T. (1985). Preschool compensatory education and the modifiability of intelligence: A critical review. In D. Detterman (Ed.), Current topics in human intelligence. Norwood, NJ: Ablex.

Reaves, J., & Burns, J. (1982). An analysis of the impact of the handicapped children's early education program. (Final report 2 for Special Education Programs, U.S. Dept. of Education; Contract No. 300-81-0661). Washington, DC: Roy Littlejohn Associates.

Richmond, J. B., Stipek, D. J., & Zigler, E. (1979). A decade of Head Start. In E. Zigler & J. Valentine (Eds.). Project Head Start: A legacy on the war on poverty. New York: Free Press.

Royster, J. (1977). National survey of Head Start graduates and their peers. Cambridge, MA: Abt Associates.

Rubenstein, J. (1967). Material attentiveness and subsequent exploratory behavior. Child Development, 38, 1089-1100.

Sameroff, A. J. (1975). Early influences on development. Merrill-Palmer Quarterly, 21, 267-294.

Schweinhart, L. J. (1985). The preschool challenge. (High/Scope Early Childhood Policy Papers, No. 4). Ypsilanti, MI: High/Scope Educational Research Foundation.

Shipman, V. C. (1972a). Disadvantaged children and their first school experiences: Demographic indexes of socioeconomic status and maternal behaviors and attitudes. (PR 7213). Princeton, NJ: Educational Testing Service.

Shipman, V. C. (1972b). Disadvantaged children and their school experiences: ETS - Head Start longitudinal study structural stability and change in the test performance of urban preschool children. (ERIC Document Reproduction Service No. ED 078 011). Princeton, NJ: Educational Testing Service.

Simmons-Martin, A. (1981). Efficiency report: Early education project. Journal of the Division for Early Childhood, 4, 5-10.

Skeels, H. M. (1966). Adult status of children with contrasting early life experiences. Monographs of the Society for Research in Child Development, 31, (3, Serial No. 105).

Skeels, H. M., & Dye, H. B. (1939). A study of the effects of differential stimulation on mentally retarded children. Proceedings and Addresses of the American Association on Mental Deficiency, 44, 114-136.

Slavin, R. (Ed.). (1986). Ability grouping and student achievement in elementary schools: A best-evidence synthesis (The Johns Hopkins University Center for Research on Elementary and Middle Schools, Report No. 1). Baltimore, MD: Johns Hopkins University.

Sopris West & National Dissemination Study Group. (1988). Educational programs that work, (14th Ed.) Longmont, CO: Sopris West.

Spencer, C. (1988). Ideology trips up child-care legislation. Report prepared for Task V Collaboration meeting on early childhood education. Washington, DC: Council for Educational Development and Research.

Spodek, B. (1978). Teaching in the early years. Englewood Cliffs, NJ: Prentice-Hall.

Spodek, B. (Ed.). (1986). Today's kindergarten: Exploring the knowledge base, expanding the curriculum. New York: Teachers College Press.

Stanford Research Institute. (1971a). Implementation of planned variation in Head Start: Preliminary evaluation of planned variation in Head Start according to Follow-Through approaches (1969-1970). Washington, DC: U.S. Dept. of Health, Education, and Welfare, Office of Child Development.

Stanford Research Institute. (1971b). Implementation of planned variation in Head Start according to Follow-Through approaches (1969-1970). (Publication OCD M 72-7). Washington, DC: U.S. Dept. of Health, Education, and Welfare, Office of Child Development.

Stanford Research Institute. (1971c). Longitudinal evaluation of selected features of the national Follow-Through program. Washington, DC: U.S. Dept. of Health, Education, and Welfare, Office of Education.

Steinfels, M. O. (1973). Who's minding the children? The history and politics of daycare in America. New York: Simon & Schuster.

Stock, J. R., Wnek, L. L., Newborg, J. A., Schenck, E. A., Gabel, J. R., Spurgeon, M. S., & Ray, H. W. (1976). Evaluations of handicapped children's early education program (HCEEP): Final report. (Contract No. OEC-0-74-0402). Columbus, OH: Battelle Center for Improved Education. (ERIC Document Reproduction Service No. ED 125 165).

Tjossem, T. (1976). Early intervention: Issues and approaches. In T. Tjossem (Ed.). Intervention strategies for high risk and handicapped children. Baltimore, MD: University Park Press.

Trohanis, P., Cox, J. O., & Meyer, R. A. (1982). A report on selected demonstration programs for infant intervention. In C. T. Ramey & P. L. Trohanis (Eds.), Finding and educating high-risk and handicapped infants. Baltimore, MD: University Park Press.

U.S. Congress. Senate. (1975). Education for All Handicapped Children Act S.6, 94th Congress, 1st Session, Report No. 94-168.

U.S. Congress. House. (1987). Select Committee on Children, Youth, and Families, U.S. children and their families. Washington DC: U.S. Govenment Printing Office.

Warger, C. (Ed.). (1988). A resource guide to public school early childhood programs. Alexandria, VA: Association for Supervision and Curriculum Development.

Weber, E. (1969). The kindergarten: Its encounter with educational thought in America. New York: Teachers College Press.

Webster's New Collegiate Dictionary. (1980). Springfield, MA: G. & C. Merriam.

Weintraub, F. J., & Ramirez, B. A. (1985). Progress in the education of the handicapped and analysis of PL 98-199: The Education of the Handicapped Act Amendments of 1983. Reston, VA: Council for Exceptional Children.

Weisberg, H. I., & Haney, W. (1977). Longitudinal evaluation of Head Start planned variation and Follow-Through. Cambridge, MA: Huron Institute.

Westinghouse Learning Corporation. (1969). The impact of Head Start: An evaluation of the effects of Head Start on children's cognitive and affective development: Executive summary. (Report to the Office of Economic Opportunity). (ERIC Document Reproduction Service No. ED 036 321). Athens: Ohio University.

Whitbread, N. (1972). The evolution of the nursery-infant school: A history of infant and nursery education in Britain, 1800-1972. London: Routledge and Kegan Paul.

White, B. (1975). The first three years of life. Englewood-Cliffs, NJ: Prentice-Hall.

Wood, M. E. (1981). Costs of intervention programs. In C. Garland, N. Stone, J. Swanson, & G. Woodruff (Eds.), Early intervention for children with special needs and their families: Findings and recommendations. Seattle: University of Washington, Western States Technical Assistance Resource (WESTAR).

Yale Bush Center Infant Care Leave Project. (1984). Facts on parents in the workforce and infant care. New Haven, CT: Author.

Yarrow, L. (1970). The etiology of mental retardation: The deprivation model. In J. Hellmuth (Ed.), Cognitive studies (Vol. 1). New York: Brunner/Mazel.

Zettel, J. J., & Ballard, J. (1979). The Education for All Handicapped Children Act of 1975, PL 94-142: Its history, origins, and concepts. Journal of Education, 161, 5-21.

Zigler, E., & Valentine, J. (1979). Project Head Start: A legacy of the war on poverty. New York: Free Press.

Zigler, E., & Yale Research Group. (1976). Summary of findings from longitudinal evaluations of intervention programs. New Haven: Yale University Press.